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Vinodh Francis Pushparaj

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MARGER JOHNSON & MCCOLLOM, P.C.  
210 SW MORRISON STREET, SUITE 400  
PORTLAND, OR 97204

EXAMINER

MARCELO, MELVIN C

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/767,392	<b>Applicant(s)</b> PUSHPARAJ, VINODH FRANCIS	
	<b>Examiner</b> Melvin Marcelo	<b>Art Unit</b> 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 10-31-2008 have been fully considered but they are not persuasive.

Applicant argues that "[t]he system of Horvitz does not make a probability determination on where to send an alert; it makes a determination on whether to send the alert at all" (Remarks, page 11). This argument is not persuasive since Horvitz explicitly teaches that his invention "determines how and when an alert should be made to the user" and includes as examples electronic mail versus telephone alert (column 9, lines 52-57). The user devices include computers, telephones, televisions, cell phones and pagers (column 2, lines 47-65). Horvitz's determination of "how and when" includes "where to send an alert" since the particular alert must be associated with a particular device (i.e. an electronic mail alert cannot be sent to a telephone or a telephone alert cannot be sent to a pager).

Applicant further argues that "Horvitz is not based on where a user will accept an alert; it is based on whether the user would like to receive the alert at all" (Remarks, page 11). This argument is not persuasive since Horvitz's "how and when" includes "where" (see above and also Horvitz' s teaching of determining the location of the user in column 12, lines 18-20). The determination on whether the user would like to receive the alert at all is only one factor which is based on the "desirably on the priority of the alert" (column 9, lines 52-58).

With respect to claim 2, Applicant argues that "there is no reason for the probability data in Horvitz to include associations between contact devices and time slots" (Remarks, page 11). This argument is not persuasive since in Horvitz's "how and when determination" (see above), "how" represents the "contact devices" and "when" represents "time slots."

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With respect to claim 3, Applicant argues that “[t]here is absolutely no suggestion in Horvitz that its system can decide whether or not to send an alert based solely on information specified by the user” (Remarks, page 12). This argument is not persuasive since Horvitz provides a centralized alert management system that is guided by knowledge of costs or preferences (column 2, line 66 to column 3, line 4) which is an improvement over the prior art where a user is not able to set preferences that affect all programs, system-wide (column 1, lines 45-48).

Applicant further argues that the Examiner is using impermissible hindsight with respect to “a user selecting which type of mode to use” (Remarks, page 12). This argument is not persuasive since it is well within the skill of an ordinary artisan in this field to modify Horvitz’s teachings of a combination determination using a probability that includes user profile directly specified by the user (i.e. user preferences) in column 7, lines 16-26 to only use preferences or probability data that excludes preferences for the reason that a preference can be “no preferences” which is the predictive mode, “use preferences” which is the combination mode, or “only use preferences” which is the preference mode. A skilled artisan would have been motivated to clearly provide a preference mode where a user has total control over the alerts for the reason that a user may not want their preferences overridden.

With respect to claim 9, Applicant argues that it is not obvious to provide a weighting factor to the user preferences to the probability (Remarks, page 13). This argument is not persuasive since the user preferences are only one of many factors in the probability determination such that the preference is not absolute.

With respect to claim 10, Applicant argues that it would not have been obvious in Horvitz to send an alert to a plurality of devices based on either a user preference or the probability. This argument is not persuasive since a skilled artisan would have been motivated to provide

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such an alert for a high priority highly critical message. For example, an emergency alert can be provided to all of the user's devices in order to increase the probability that the user receives the alert.

With respect to claim 13, Applicant argues that Horvitz already knows what device the user responded on because it already knows where it sent the alert. This argument is not persuasive since it assumes that only one alert can be sent in Horvitz. It is well within the skill of an ordinary artisan to send multiple alerts as a preference where the user can set their preferences and the user has multiple devices to receive alerts. A user expecting an important alert may set as a preference their office telephone in addition to their cell phone during work hours for the reason that they may have to take a break to go to the rest room.

With respect to claim 14, Applicant argues that Horvitz only refers to raising the probability that the user will want to receive the alert independent of any particular device. This argument is not persuasive since Horvitz explicitly teaches that his invention "determines how and when an alert should be made to the user" and includes as examples electronic mail versus telephone alert (column 9, lines 52-57). Thus, the "how" determination depends on the particular device--computer alert or telephone alert in the example.

With respect to claim 15, a failure threshold would have been obvious for the reason that a skilled artisan would have been motivated to provide the capability to contact the user when the probability of contacting the user has become zero.

With respect to claim 16, Applicant argues that Horvitz does not teach separate probability for each of a plurality of contact devices. This argument is not persuasive since the separate probabilities would have been obvious in view of Horvitz's "how" determination (see above), wherein deciding on a electronic mail alert versus a telephone alert would have

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obviously included the probability of reaching the user on a computer or the probability of reaching the user on a telephone.

With respect to claims 17 and 26, Applicant argues that Horvitz is based on either sending or not sending an alert based solely on a probability. This argument is not persuasive since Horvitz explicitly teaches that his invention “determines how and when an alert should be made to the user” and includes as examples electronic mail versus telephone alert (column 9, lines 52-57). It would have been obvious for the user to select both electronic mail and telephone alerts as a preference in determining “how” to send the alert. With respect to sending another alert if the first one is not responded to, this would have been obvious in view of the “when” determination where a skilled artisan would have been motivated to set as a preference additional device alerts for high priority messages.

With respect to claim 18, Applicant argues that Horvitz system is to avoid distracting a user when they do not want to be distracted. This argument is not persuasive since Horvitz's system includes priority alerts (column 9, lines 54-58) which is an indication of whether the alert is important enough that distraction is overridden.

With respect to claim 19, this feature would have been obvious for a range of devices since the probabilities in Horvitz are based on the contact devices when he provides a “how” determination in contacting the user (see above).

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horvitz (US 6618716 B1).

Horvitz teaches the predictive intelligent routing of calls to users using a probability determination (Figure 7) for receiving alerts from multiple devices and forwarding the alerts to the determined user device.

Horvitz does not teach the “probability of the user answering an incoming call intended for the user at each of a plurality of contact devices.” However, Horvitz does teach to use a probability distribution such as a Bayesian network model to infer the probabilities of alternate states of attention, the availability probability, or the probability over the period of time until the user becomes available for reviewing alerts at minimal cost” in addition to a singular “user-availability probability” which is the probability that the user is currently in a state where he or she is either actively interested in reviewing alerts or becomes available to receive a notification with zero or minimal cost (column 2, lines 25-46). As shown in Figure 3, the probability 300 is affected by the Profile of Prior Knowledge 302 which includes a user profile directly specified by the user or assessed from the user, or of knowledge that has been learned by observing user’s responses to previous alerts, wherein the probability increases or decreases based on whether the user has been receptive to alerts in the past (column 7, lines 16-26). The types of alerts that have been made to the user in the past is also recorded in the previous alerts history 608 (column 9, lines 47-51). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a probability distribution function based on the probability of the user answering an incoming call intended for the user at each of a plurality of contact devices for the reason that a user answering an incoming call at a particular device is clearly an observable event since Horvitz suggests observing user’s responses to previous

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alerts where the type of alerts are known and knowledge learned from the observation is used to determine the probability distribution.

With respect to claim 1, "preference from a user to associate at least one contact device and at least one time slot" and claim 2, the "probability data comprising a list of associations between contact devices and time slots," it would have been obvious in Horvitz since Horvitz teaches more than just the single availability probability. A skilled artisan would have been motivated to include the association between contact devices and time slots for the reason that Horvitz includes a profile of prior knowledge which includes a user profile directly specified by the user, wherein such a user would have obviously specified that a contact device be a cell phone in the time slot when they know that they will be away from their office (i.e. lunch hour) and the office telephone when they are in their office since the cost of the cell phone is a factor in determining the type of alert (column 13, lines 35).

With respect to claims 3 and 8, it would have been obvious for Horvitz to provide the user the ability to select a mode for determining which devices they will be contact on as a matter of choice in design since Horvitz teaches that the Profile of Prior Knowledge 302 affects the probability (Figure 3 and column 7, lines 16-26), but not the degree. A skilled artisan would have been motivated to clearly specify to use only the user profile directly specified by the user (i.e. user preferences) when the user only wants a specific alert such as the user specifying the cell phone as the only contact device when they are on extended leave away from their office and to use the probability distribution function alerts when the multiple devices are available. With respect to claim 9, the weighting factor is an obvious choice in design based on the effect of the Profile of Prior Knowledge 302 on the probability distribution function since other factors such as Bayesian Network 320 and Contextual Events 304 are considered in the probability determination as shown in Figure 3.

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With respect to claim 6, Horvitz clearly teaches that the success or failure of the contact signal affects the probability distribution function (column 7, lines 16-26).

With respect to claim 10, it would have been obvious to one of ordinary skill in the art at the time the invention was made to transmit the contact signal to a plurality of contact devices since a skilled artisan would have been motivated to designate a plurality of contact devices in their user profile for highly critical messages (i.e. an expectant father may designate all their devices to receive any alerts from the expecting mother). Horvitz clearly teaches that the user profile is directly specified by the user (column 7, lines 18-19).

With respect to claim 12, the phone call, fax signal, an instant message or a video call alerts is obvious for the reason that Horvitz teaches that the alerts can be any manner that is audio and/or visual (column 6, lines 56-58), wherein a phone call is well known as audio, a fax signal and instant message are well known as visual, and a video call is well known as audio/visual.

With respect to claim 13, it would have been obvious to determine what contact device the user answers the incoming call since Horvitz teaches that the profile of prior knowledge 302 includes knowledge that has been learned by observing user's response to previous alerts (column 7, lines 20-21) and the previous alerts history 608 indicates the types of alerts that have been made to the user in the past, wherein a skilled artisan would have been motivated to observe that a user responded to a previous alert to a particular type of device.

Horvitz does not teach the use of a failure threshold or success threshold for updating the probability data. In Horvitz, if the user has been receptive to alerts in the past, this may increase the probability, while if the user has not been receptive to alerts in the past, this may decrease the probability (column 7, lines 23-26). With respect to the failure threshold (claims 15 and 23), it would have been obvious for the system to query the user to change its specified

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user profile (column 7, lines 16-21), resulting in a best mode of prediction, where the user has not been receptive to alerts in the past such that its probability of contact is at a threshold of zero or near zero. The reason for this is that the currently selected user profile may result in the user being completely unreceptive to alerts, which would have required a change in the user profile.

With respect to the success threshold (claims 16 and 24), it would have been obvious to order a probability for each contact device based upon past successes since Horvitz teaches to increase probability when the user has been receptive to alerts in the past, wherein a single reception constitutes a success threshold.

With respect to sending multiple contact signals to a first set of contact devices, Horvitz teaches that the user may be in different locations (office or offsite location in column 1, lines 56-60). It would have been obvious for the user selected profile to indicate multiple contact devices based on the devices location (a set of devices at the office and a similar set of devices at the offsite location). The motivation for selecting multiple contact devices is that the message may be highly critical (column 13, lines 49-65) and the user may want multiple contact devices to provide an alert in order to not miss the critical message. The user selected contact devices are provided in the user profile which is used in the probability of success determination (column 7, lines 16-26).

### Claims

1. A network device (**Horvitz, Figure 2**), comprising:

*a user interface configured to receive a preference from a user to associate at least one contact device and at least one period of time* (**Obvious since the user can specify a user profile (column 7, lines 16-21), wherein a skilled artisan would have been motivated to specify their cell phone during their lunch hour since they are away from their office);**

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*a predictor configured to predict a probability of the user answering an incoming call intended for the user at each of a plurality of contact devices* (**Obvious since the Attentional Status Module 204 in Figure 2 generates a probability distribution in addition to the single availability probability, column 7, lines 4-26**);

*a first port to receive the incoming call intended for the user* (**Receive Alert 700 in Figure 7**);

*a second port to send contact signals to at least one of the plurality of contact devices responsive to the incoming call, depending upon at least one of the preference and the probability* (**Alert User 704 based on the probability in Figure 7, wherein the probability is based on the user preference in the Profile of Prior Knowledge 302 in Figure 3**);

*a processor* (**Processing Unit 21 in Figure 1**) *to:*

*determine connection information based upon the contact device at which the user responds to the contact signal* (**Obvious since Horvitz observes user's response to previous alerts which includes receptive/success or not receptive/failure in column 7, lines 16-26**); *and*

*transmit the connection information to the predictor to allow the predictor to update probability data associated with the user* (**Updated probability data based on whether the user was receptive or not receptive to the alert in column 7, lines 16-26**).

2. *The network device of claim 1, the device further comprising a memory to store the probability data, the probability data comprising a list of associations between contact devices and time slots* (**It is inherent in Horvitz for a memory to store probability data since real-time information is used to update the probability distribution (column 8, lines 45-49) such that the prior probability must be stored and provided to the update determination.**

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**The probability data based on associations between contact devices and time slots are obvious for the reason that the user can select a user profile as explained above).**

3. *The network device of claim 1, the user interface further configured to receive a selection from the user to select at least one of a predictive mode, a combination mode, and a preference mode, wherein:*

*In the predictive mode, the contact signals are sent to the at least one of the plurality of contact devices based on the probability (Obvious choice in design since the probability is based on many factors besides the user preference in the Profile of Prior Knowledge 302 which affects the probability determination (column 7, lines 16-26), wherein a skilled artisan would have been motivated to ignore the user preference if the user has not specified any preferences);*

*In the preference mode, the contact signals are sent to the at least one of the plurality of contact devices based on the preference (Obvious choice in design since a skilled artisan would have been motivated to specify only a particular contact device as a user preference); and*

*In the combination mode, the contact signals are sent to the at least one of the plurality of contact devices based on the preference and the probability (Horvitz teaches the combination mode wherein the user preference in the Profile of Prior Knowledge 302 affects the probability determination (column 7, lines 16-26)).*

4. *The network device of claim 1, wherein the plurality of contact devices are selected from the group consisting of: pagers, cellular phones, landline phones, computers, personal digital*

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*assistants, and mobile computing devices* (**Obvious since these known contact devices are similar to the cell phone and pager examples in column 2, lines 62-65).**

5. *The network device of claim 1, the incoming call further comprising: a phone call, a fax signal, an instant message, and a video call* (**Obvious since Horvitz teaches that the external devices providing incoming alerts are not limited to the cited examples of computers and telephones in column 9, lines 5-13).**

6. *A method of contacting a user, comprising:*  
*receiving an incoming call for a user at a first device* (**Receive Alert 700 in Figure 7);**  
*accessing user preferences for contacting the user* (**User direct specified profile, column 7, lines 16-21);**  
*predicting a probability of the user answering the incoming call from at least one contact device based upon the user preferences and probability data* (**Obvious since Attentional Status Module 204 in Figure 2 generates probability distribution based on user preference in the Profile of Prior Knowledge in column 7, lines 4-26);**  
*transmitting a contact signal to at least one device based on at least one of the user preferences and the probability* (**Alert User 704 in Figure 7 based on probability 702);**  
*determining the success or failure of the contact signal by determining whether the user answered the incoming call* (**Observing user's response to previous alerts which includes receptive/success or not receptive/failure in column 7, lines 16-26); and**  
*updating the probability data based on the success or failure of the contact signal* (**Updated probability data based on whether the user was receptive or not receptive to the alert in column 7, lines 16-26).**

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7. *The method of claim 6, receiving the incoming call further comprising receiving one of the group consisting of: a phone call, a fax signal, an instant message and a video call* (**Obvious since Horvitz teaches that the external devices providing incoming alerts are not limited to the cited examples of computers and telephones in column 9, lines 5-13).**

8. *The method of claim 6, accessing user preferences further comprising accessing an indicator specifying at least one of a predictive mode, a combination mode, and a preference mode* (**Obvious choice in design since the probability is based on many factors besides the user preference in the Profile of Prior Knowledge 302 which affects the probability determination (column 7, lines 16-26), wherein a skilled artisan would have been motivated to designate the weight of the user preference such as no weight if nothing is specified for predictive mode and only user preference if a particular alert is desired).**

9. *The method of claim 8, accessing user preferences further comprising accessing the indicator for a combination mode and transmitting the contact signals further comprising determining the at least one device by applying a weighting factor based on the user preferences to the probability* (**User direct specified profile is obviously weighted since it is only one of many factors in determining the probability in Figure 3 and column 7, lines 16-21).**

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10. *The method of claim 6, transmitting the contact signal further comprising transmitting the contact signal to a plurality of contact devices based on at least one of the user preferences and the probability* **(Obvious since a skilled artisan would have been motivated to designate a plurality of contact devices in their user profile for highly critical messages).**

11. *The method of claim 6, predicting a probability further comprising applying Bayes's Theorem to the contact devices* **(Bayesian module, column 8, lines 24-49).**

12. *The method of claim 6, transmitting a contact signal further comprising transmitting one of the group consisting of: a phone call, a fax signal, an instant message or a video call* **(Obvious since Horvitz teaches that the contact signal can be audio and/or visual in column 6, lines 55-57).**

13. *The method of claim 6, determining the success or failure further comprising determining at what contact device the user answers the incoming call* **(Obvious since Horvitz observes the user's responses to previous alerts in column 7, lines 23-26).**

14. *The method of claim 13, updating the probability data further comprising raising the probability of the contact device at which the user answers the incoming call* **(Receptive to alerts raises the probability of a device, column 7, lines 23-26).**

15. *The method of claim 6, updating the probability data further comprising:*

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*determining that a success rate is below a failure threshold after a predetermined period of time* (**Probability is decreased if the user has not been receptive to alerts in the past, column 7, lines 23-26**); *and*

*querying the user to select a broadcast mode, select a probability mode, or update the user preferences* (**It would have been obvious to query the user to update its user profile to a best mode of prediction where the currently selected user profile has resulted in zero or near zero reception of alerts**).

16. *The method of claim 6, updating the probability data further comprising:*

*determining that a success rate is above a success threshold* (**Probability is increased for successful reception of alerts in the past, column 7, lines 23-26**); *and*

*determining a probability for each of a plurality of contact devices based upon past successes* (**It would have been obvious to order the contact device based upon past successes since Horvitz teaches to update the probability based on successful reception or not, wherein the probability in Horvitz constitutes a plurality of probabilities (column 6, lines 30-58)**).

17. *The method of claim 6, transmitting a contact signal further comprising:*

*determining a first set of contact devices having a probability of success within a predetermined range* (**Probability data is determined base on user specified profile, wherein alerts are sent to the high probability devices of the user, column 7, lines 16-26**); *and*

*sending multiple contact signals to contact devices in the first set in parallel* (**It would have been obvious to specify a set of devices based on locations such as at an office or**

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**offsite where the message is highly critical and the user wants multiple device alerts so as to not miss the alert) ; and**

*if no success occurs, determining a next set of contact devices having a probability of success within a next range* **(It would have been obvious for a user to specify that if the critical alert is unsuccessful at a plurality of devices at an office, the plurality of devices at an offsite should be tried in order for the user to receive the critical message).**

18. *The method of claim 17, the method further comprising repeating the determining and sending processes until a success occurs* **(It would have been obvious to keep trying to provide a highly critical message to a user).**

19. *The method of claim 17, the method further comprising altering at least one of the predetermined ranges and the next range depending upon successes* **(Horvitz teaches to update the probability based on success or failure, column 7, lines 23-26).**

20. *A network device, comprising:*

*a means for receiving a preference from a user associating at least one contact device with at least one time slot* **(Obvious since the user can specify a user profile (column 7, lines 16-21), wherein a skilled artisan would have been motivated to specify their cell phone during their lunch hour since they are away from their office);**

*a means for predicting a probability of the user answering an incoming call intended for the user at each of a plurality contact devices* **(Obvious since the Attentional Status Module 204 in Figure 2 generates a probability distribution in addition to the single availability probability, column 7, lines 4-26);**

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*a means for receiving the incoming call intended for the user* (**Receive Alert 700 in Figure 7**);

*a means for sending contact signals to at least one of the plurality of contact devices responsive to the incoming call, depending upon at least one of the preference and the probability* (**Alert User 704 based on the probability in Figure 7, wherein the probability is based on the user preference in the Profile of Prior Knowledge 302 in Figure 3**);

*a means for:*

*determining connection information based upon the contact device at which the user responds to the contact signal* (**Obvious since Horvitz observes user's response to previous alerts which includes receptive/success or not receptive/failure in column 7, lines 16-26**); *and*

*transmitting the connection information to the predictor to allow the predictor to update probability data associated with the user* (**Updated probability data based on whether the user was receptive or not receptive to the alert in column 7, lines 16-26**).

21. *The network device of claim 20, the device further comprising a means for storing the probability data* (**It is inherent in Horvitz for a memory to store probability data since real-time information is used to update the probability distribution (column 8, lines 45-49) such that the prior probability must be stored and provided to the update determination**).

22. *An computer-readable medium containing computer-executable instructions that, when executed, cause the computer to:*

*receive an incoming call for a user at a first device* (**Receive Alert 700 in Figure 7**);

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*access user preferences for contacting the user (User direct specified profile, column 7, lines 16-21);*

*predict a probability of the user answering the incoming call from at least one contact device based upon the user preferences and probability data (Obvious since Attentional Status Module 204 in Figure 2 generates probability distribution based on user preference in the Profile of Prior Knowledge in column 7, lines 4-26);*

*transmit a contact signal to at least one device based on at least one of the user preferences and the probability (Alert User 704 in Figure 7 based on probability 702);*

*determine the success or failure of the contact signal by determining whether the user answered the incoming call (Observing user's response to previous alerts which includes receptive/success or not receptive/failure in column 7, lines 16-26); and*

*update the probability data based on the success or failure of the contact signal (Updated probability data based on whether the user was receptive or not receptive to the alert in column 7, lines 16-26).*

23. *The medium of claim 22, the code causing the computer to update the probability data further causing the machine to:*

*determine that a success rate is below a failure threshold after a predetermined period of time (Probability is decreased if the user has not been receptive to alerts in the past, column 7, lines 23-26); and*

*query the user to select a broadcast mode, select a probability mode or update the user preferences (It would have been obvious to query the user to update its user profile to a best mode of prediction where the currently selected user profile has resulted in zero or near zero reception of alerts).*

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24. *The medium of claim 22, the code causing the computer to update the probability data further causing the machine to:*

*determining that a success rate is above a success threshold (Probability is increased for successful reception of alerts in the past, column 7, lines 23-26); and*

*determining a probability for each of a plurality of contact devices based upon past successes (It would have been obvious to order the contact device based upon past successes since Horvitz teaches to update the probability based on successful reception or not, wherein the probability in Horvitz constitutes a plurality of probabilities (column 6, lines 30-58)).*

25. *The medium of claim 22, the code causing the computer to update the probability data further causing the machine to transmit a contact signal further comprising:*

*determine a first set of contact devices having a probability of success within a predetermined range (Probability data is determined base on user specified profile, wherein alerts are sent to the high probability devices of the user, column 7, lines 16-26);*

*send multiple contact signals to contact devices in the first set in parallel (It would have been obvious to specify a set of devices based on locations such as at an office or offsite where the message is highly critical and the user wants multiple device alerts so as to not miss the alert); and*

*if no success occurs, determine a next set of contact devices having a probability of success within a next range (It would have been obvious for a user to specify that if the critical alert is unsuccessful at a plurality of devices at an office, the plurality of devices at an offsite should be tried in order for the user to receive the critical message).*

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26. *A method of contacting a user, comprising:*

*receiving an incoming call for a first user from a second user (**Receive Alert 700 in Figure 7**);*

*accessing a first probability of the first user answering the incoming call on a first contact device (**Obvious since the Attentional Status Module 204 in Figure 2 generates a probability distribution in addition to the single availability probability, column 7, lines 4-26**);*

*transmitting the incoming call to the first contact device based on the first probability (**Alert User 704 in Figure 7 based on probability 702**);*

*determining the success or failure of the transmitting by determining whether the first user answered the incoming call at the first device (**Observing user's response to previous alerts which includes receptive/success or not receptive/failure in column 7, lines 16-26**);*

*updating probability data based on the success or failure of the transmitting (**Updated probability data based on whether the user was receptive or not receptive to the alert in column 7, lines 16-26**); and*

*when a failure is determined (**Obvious for a user preference to try multiple contact devices for the reason that the user desires to receive highly critical alerts**);*

*accessing a second probability of the first user answering the incoming call on a second contact device from the plurality of contact devices (**Obvious since the Attentional Status Module 204 in Figure 2 generates a probability distribution in addition to the single availability probability, column 7, lines 4-26**); and*

*transmitting the incoming call to the second contact device based on the second probability (**Alert User 704 in Figure 7 based on probability 702**).*

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***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin Marcelo whose telephone number is 571-272-3125. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derrick W. Ferris can be reached on 571-272-3123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Melvin Marcelo/  
Primary Examiner  
Art Unit 2416

February 2, 2009